CLAIMS

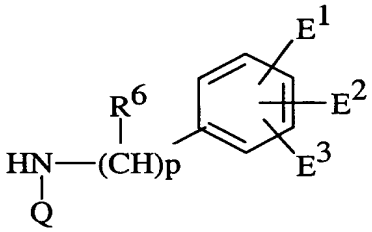
What is claimed is:

1. A composition of a retinoid and an erb inhibitor.

2. A composition according to Claim 1 where a retinoid is selected from all-*trans*-retinal, all-*trans* retinol, all-*trans* retinoic acid, 9-cis-retinoic acid, 13-cis-retinoic acid, 13-cis-retinal, 13-cis-retinol, 9-cis-retinal, or 9-cis-retinol.

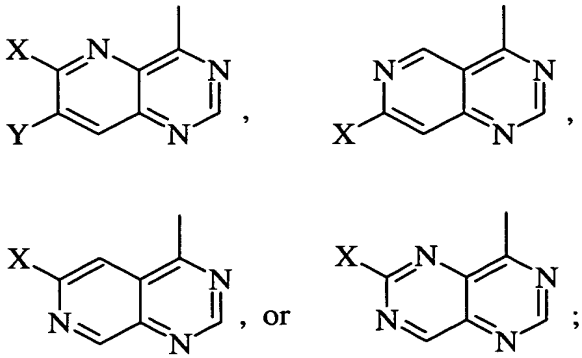
3. A composition according to Claim 2 wherein the erb inhibitor is a quinazoline or a pyridopyrimidine; or
wherein the erb inhibitor is a quinazoline; or
the erb inhibitor is a pyridopyrimidine.

4. A composition according to Claim 3 where the erb inhibitor is a compound according to Formula II



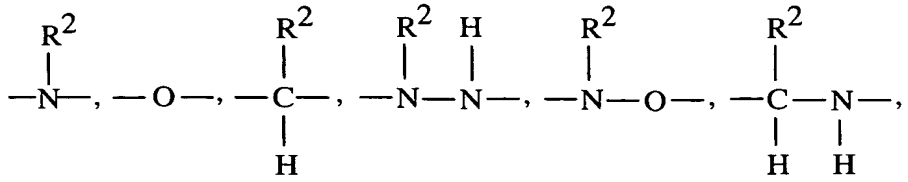
II

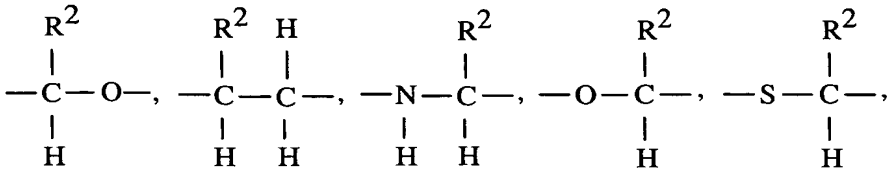
wherein Q is



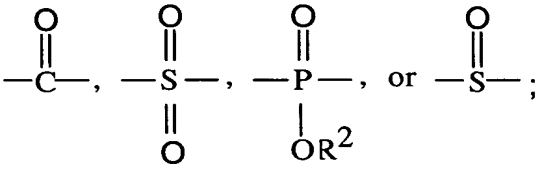
p is 0 or 1;

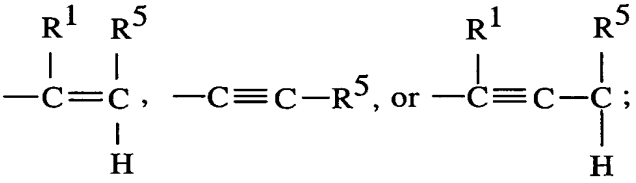
X is -D-E-F and Y is $-SR^4$, $-OR^4$, $-NHR^3$, or hydrogen, or X is $-SR^4$, $-OR^4$, $-NHR^3$, or hydrogen, and Y is -D-E-F;

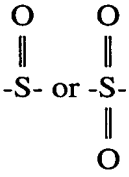
D is 

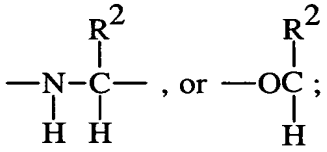


or absent;

E is  ;

F is  ;

provided that when E is -S- or  , D is not

 ;

R^1 is hydrogen, halogen, or C_1-C_6 alkyl;

R^2, R^3, and R^4 are independently hydrogen, C_1-C_6 alkyl, $-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-N-piperazinyl, $-(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-imidazoyl, $-(CH_2)_n$-N-

morpholino, -$(CH_2)_n$-N-thiomorpholino, -$(CH_2)_n$-N-hexahydroazepine or substituted C_1-C_6 alkyl, wherein the substituents are selected from OH, -NH_2, or -N(A)-B, A and B are independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$OH, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-N-pyridyl, -$(CH_2)_n$-imidazoyl, or -$(CH_2)_n$-N-imidazoyl;

E^1, E^2, and E^3 are independently halogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_3-C_8 cycloalkoxy, nitro, C_1-C_6 perfluoroalkyl, hydroxy, C_1-C_6 acyloxy, -NH_2, -NH(C_1-C_6 alkyl), -N(C_1-C_6 alkyl)$_2$, -NH(C_3-C_8 cycloalkyl), -N(C_3-C_8 cycloalkyl)$_2$, hydroxymethyl, C_1-C_6 acyl, cyano, azido, C_1-C_6 thioalkyl, C_1-C_6 sulfinylalkyl, C_1-C_6 sulfonylalkyl, C_3-C_8 thiocycloalkyl, C_3-C_8 sulfinylcycloalkyl, C_3-C_8 sulfonylcycloalkyl, mercapto, C_1-C_6 alkoxycarbonyl, C_3-C_8 cycloalkoxycarbonyl, C_2-C_4 alkenyl, C_4-C_8 cycloalkenyl, or C_2-C_4 alkynyl;

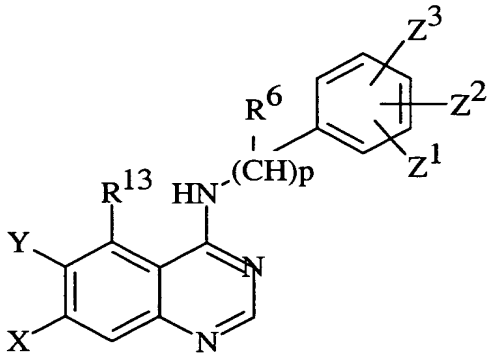
R^5 is hydrogen, halogen, C_1-C_6-perfluoroalkyl, 1,1-difluoro(C_1-C_6)alkyl, C_1-C6 alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-piperazinyl, -$(CH_2)_n$-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-pyridinyl, -$(CH_2)_n$-N-imidazoyl, -$(CH_2)_n$-N-morpholino, -$(CH_2)_n$-N-thiomorpholino, -C(H)=CH_2, -CH=CH-(C_1-C_6)alkyl, -$(CH_2)_n$-N-hexahydroazepine, -$(CH_2)_n$$NH_2$, -$(CH_2)_n$NH($C_1$-$C_6$alkyl), -$(CH_2)_n$N($C_1$-$C_6$ alkyl)$_2$, -1-oxo(C_1-C_6)alkyl, carboxy, (C_1-C_6) alkyloxycarbonyl, N-(C_1-C_6)alkylcarbamoyl, phenyl or substituted phenyl, wherein the substituted phenyl can have from

one to three substituents independently selected from Z^1, Z^2, Z^3 or a monocyclic heteroaryl group, and each C_1-C_6 alkyl group can be substituted with -OH, -NH_2 or -NAB, where A and B are as defined above, R^6 is hydrogen or C_1-C_6 alkyl; and

n is 1 to 4, p is 0 and 1, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

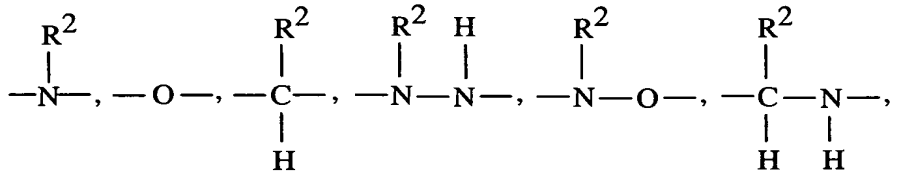
5. A composition according to Claim 4 wherein the erb inhibitor is 5-(4-methyl-piperazin-1-yl)-pent-2-ynoic acid [4-(3-chloro-4-fluoro-phenylamino)-pyrido[3,4-d]pyrimidin-6-yl]-amide; or wherein the erb inhibitor is N^4-(3-bromo-phenyl)-N^6-methyl-pyrido[3,4-d]pyrimidine-4,6-diamine.

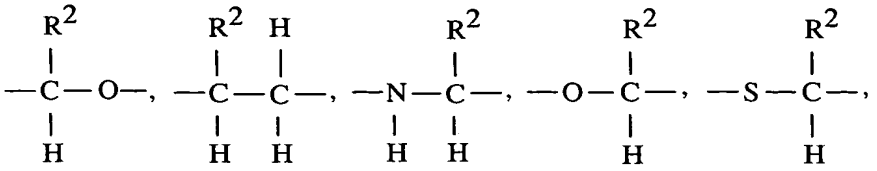
6. A composition according to Claim 3 wherein the quinazoline is a compound of Formula I



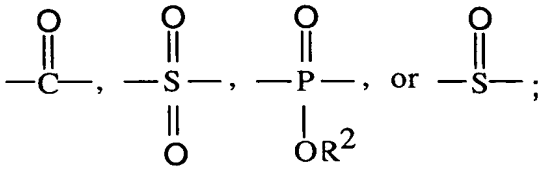
I

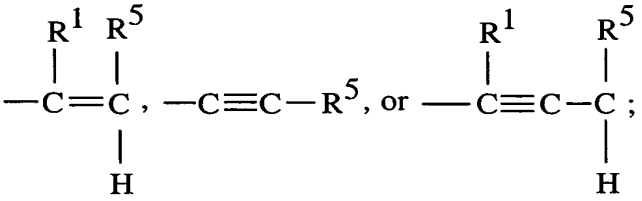
wherein X is -D-E-F and Y is -SR^4, halogen, -OR^4, -NHR^3, or hydrogen, or X is -SR^4, halogen, -OR^4, -NHR^3, or hydrogen, and Y is -D-E-F;

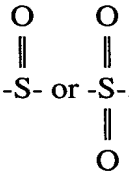
D is 

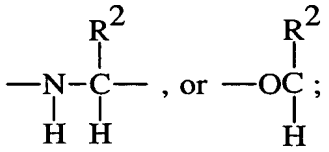


or absent;

E is  ;

F is  ;

provided that when E is -S- or -S-, D is not 



R^1 is hydrogen, halogen, or C_1-C_6 alkyl;

R^2, R^3, and R^4 are independently hydrogen, C_1-C_6 alkyl,

$-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-N-piperazinyl,

$-(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl,

$-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-imidazoyl,

$-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino,

$-(CH_2)_n$-N-hexahydroazepine or substituted C_1-C_6 alkyl, wherein

the substituents are selected from -OH, $-NH_2$, or , A and B are

independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$OH, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6-)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-N-pyridyl, -$(CH_2)_n$-imidazoyl, or -$(CH_2)_n$-N-imidazoyl;

Z^1, Z^2, or Z^3 are independently hydrogen, halogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_3-C_8 cycloalkoxy, nitro, C_1-C_6 perfluoroalkyl, hydroxy, C_1-C_6 acyloxy, -NH_2, -NH(C_1-C_6 alkyl), -N(C_1-C_6 alkyl)$_2$, -NH(C_3-C_8 cycloalkyl), -N(C_3-C_8 cycloalkyl)$_2$, hydroxymethyl, C_1-C_6 acyl, cyano, azido, C_1-C_6 thioalkyl, C_1-C_6 sulfinylalkyl, C_1-C_6 sulfonylalkyl, C_3-C_8 thiocycloalkyl, C_3-C_8 sulfinylcycloalkyl, C_3-C_8 sulfonylcycloalkyl, mercapto, C_1-C_6 alkoxycarbonyl, C_3-C_8 cycloalkoxycarbonyl, C_2-C_4 alkenyl, C_4-C_8 cycloalkenyl, or C_2-C_4 alkynyl;

R^5 is hydrogen, halogen, C_1-C_6-perfluoroalkyl, 1,1-difluoro(C_1-C_6)alkyl, C_1-C_6alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-piperazinyl, -$(CH_2)_n$-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-pyridinyl, -$(CH_2)_n$-N-imidazoyl, -$(CH_2)_n$-N-morpholino, -$(CH_2)_n$-N-thiomorpholino, -C=CH_2, -CH=CH-(C_1-C_6)alkyl, (H), -$(CH_2)_n$-N-hexahydroazepine, -$(CH_2)_n$$NH_2$, -$(CH_2)_n$NH($C_1$-$C_6$alkyl), -$(CH_2)_n$N($C_1$-$C_6$alkyl)$_2$, -1-oxo($C_1$-$C_6$)alkyl, carboxy, ($C_1$-$C_6$)alkyloxycarbonyl, N-($C_1$-$C_6$)alkylcarbamoyl, phenyl or substituted phenyl, wherein the substituted phenyl can have from one to three substituents independently selected from Z^1, Z^2, Z^3 or a monocyclic heteroaryl group, and each C_1-C_6 alkyl group above in R^5 can be substituted

with -OH, $-NH_2$ or -NAB, where A and B are as defined above, R^6 is hydrogen or C_1-C_6 alkyl; R^{13} is hydrogen or halogen; and

n is 1 to 4, p is 0 or 1, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof.

7. A composition of Claim 6 wherein the quinazoline is a 4-phenyl or substituted phenylamino compound; or

wherein the erb inhibitor is N-[4-(3-chloro-4-fluoro-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide or a salt thereof; or

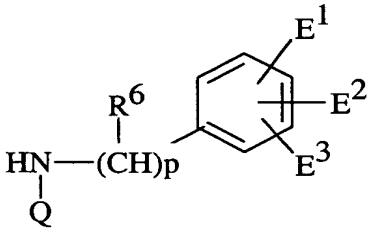
wherein the erb inhibitor is N-[4-(3-bromo-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide.

8. A kit containing a retinoid in one compartment and an erb inhibitor in a second compartment; or

wherein a retinoid is selected from all-*trans*-retinal, all-*trans* retinol, all-*trans* retinoic acid, 9-cis-retinoic acid, 13-cis-retinoic acid, 13-cis-retinal, 13-cis-retinol, 9-cis-retinal, or 9-cis-retinol; or

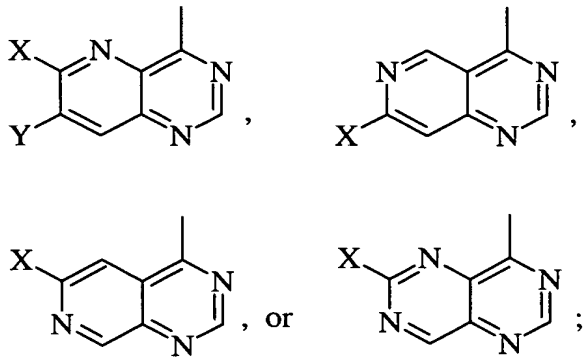
wherein the erb inhibitor is a pyridopyrimidine; or

wherein the erb inhibitor is a compound according to Formula II



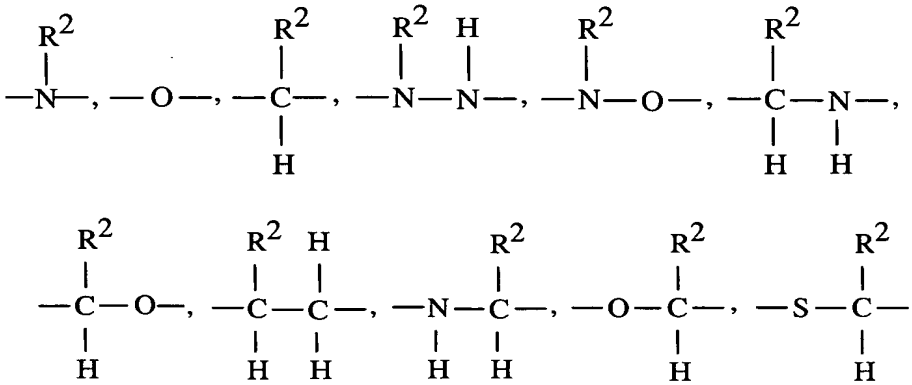
II

wherein Q is

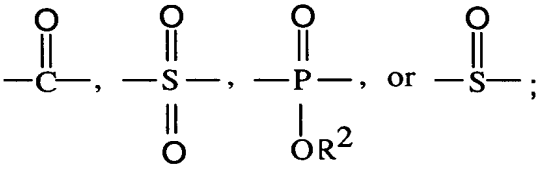


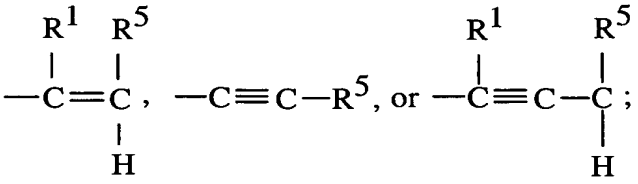
p is 0 or 1;

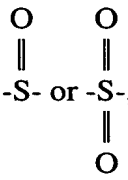
X is -D-E-F and Y is $-SR^4$, $-OR^4$, $-NHR^3$, or hydrogen, or X is $-SR^4$, $-OR^4$, $-NHR^3$, or hydrogen, and Y is -D-E-F;

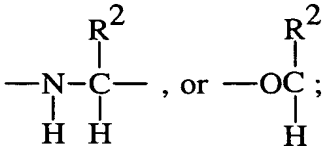
D is 

or absent;

E is 

F is 

provided that when E is -S- or  , D is not



R^1 is hydrogen, halogen, or C_1-C_6 alkyl;

R^2, R^3, and R^4 are independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-pyridinyl, -$(CH_2)_n$-N-imidazoyl, -$(CH_2)_n$-imidazoyl, -$(CH_2)_n$-N-morpholino, -$(CH_2)_n$-N-thiomorpholino, -$(CH_2)_n$-N-hexahydroazepine or substituted C_1-C_6 alkyl, wherein the substituents are selected from OH, -NH_2, or -N(A)-B, A and B are independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$OH, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-N-pyridyl, -$(CH_2)_n$-imidazoyl, or -$(CH_2)_n$-N-imidazoyl;

E^1, E^2, and E^3 are independently halogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_3-C_8 cycloalkoxy, nitro, C_1-C_6 perfluoroalkyl, hydroxy, C_1-C_6 acyloxy, -NH_2, -NH(C_1-C_6 alkyl), -N(C_1-C_6 alkyl)$_2$, -NH(C_3-C_8 cycloalkyl), -N(C_3-C_8 cycloalkyl)$_2$, hydroxymethyl, C_1-C_6 acyl, cyano, azido, C_1-C_6 thioalkyl, C_1-C_6 sulfinylalkyl, C_1-C_6 sulfonylalkyl, C_3-C_8 thiocycloalkyl, C_3-C_8 sulfinylcycloalkyl, C_3-C_8 sulfonylcycloalkyl, mercapto, C_1-C_6 alkoxycarbonyl, C_3-C_8 cycloalkoxycarbonyl, C_2-C_4 alkenyl, C_4-C_8 cycloalkenyl, or C_2-C_4 alkynyl;

R^5 is hydrogen, halogen, C_1-C_6-perfluoroalkyl, 1,1-difluoro(C_1-C_6)alkyl, C_1-C6 alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-piperazinyl,

$-(CH_2)_n$-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino, $-C{=}CH_2$, $-CH{=}CH-(C_1-C_6)$alkyl, $-(CH_2)_n$-N-hexahydroazepine, $-(CH_2)_nNH_2$, $-(CH_2)_nNH(C_1-C_6$alkyl), $-(CH_2)_nN(C_1-C_6$ alkyl)$_2$, -1-oxo(C_1-C_6)alkyl, carboxy, (C_1-C_6) alkyloxycarbonyl, N-(C_1-C_6)alkylcarbamoyl, phenyl or substituted phenyl, wherein the substituted phenyl can have from one to three substituents independently selected from Z^1, Z^2, Z^3 or a monocyclic heteroaryl group, and each C_1-C_6 alkyl group can be substituted with -OH, $-NH_2$ or -NAB, where A and B are as defined above, R^6 is hydrogen or C_1-C_6 alkyl; and

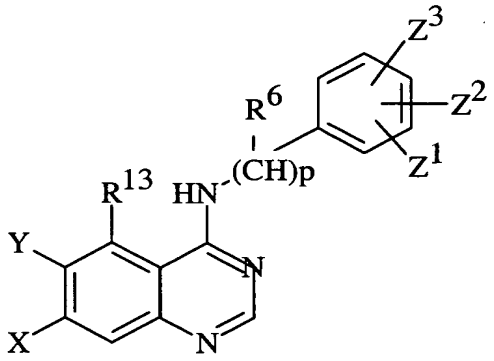
n is 1 to 4, p is 0 and 1, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof; or

wherein the erb inhibitor is 5-(4-methyl-piperazin-1-yl)-pent-2-ynoic acid [4-(3-chloro-4-fluoro-phenylamino)-pyrido[3,4-d]pyrimidin-6-yl]-amide; or

wherein the erb inhibitor is N^4-(3-bromo-phenyl)-N^6-methyl-pyrido[3,4-d]pyrimidine-4,6-diamine; or

wherein the erb inhibitor is a quinazoline; or

wherein the quinazoline is a compound of Formula I

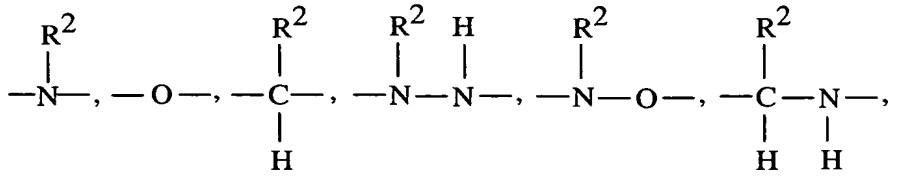


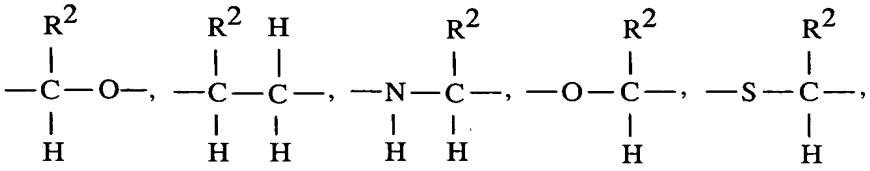
I

wherein X is -D-E-F and Y is $-SR^4$, halogen, $-OR^4$, $-NHR^3$, or hydrogen,

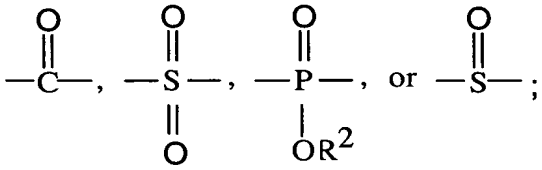
or X is $-SR^4$, halogen, $-OR^4$, $-NHR^3$, or hydrogen, and Y is

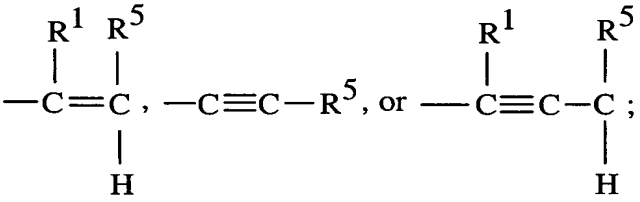
-D-E-F;

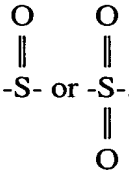
D is 

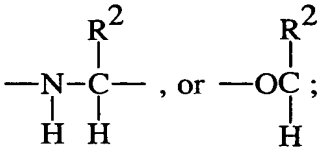


or absent;

E is  ;

F is  ;

provided that when E is  D is not

 ;

R^1 is hydrogen, halogen, or C_1-C_6 alkyl;

R^2, R^3, and R^4 are independently hydrogen, C_1-C_6 alkyl,

$-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-N-piperazinyl,

$-(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl,

$-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-imidazoyl, $-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino, $-(CH_2)_n$-N-hexahydroazepine or substituted C_1-C_6 alkyl, wherein the substituents are selected from -OH, $-NH_2$, or $-N(A)-B$, A and B are independently hydrogen, C_1-C_6 alkyl, $-(CH_2)_nOH$, $-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-N-piperazinyl, $-(CH_2)_n-N_1$-piperazinyl[N_4-(C_1-C_6-)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-N-pyridyl, $-(CH_2)_n$-imidazoyl, or $-(CH_2)_n$-N-imidazoyl;

Z^1, Z^2, or Z^3 are independently hydrogen, halogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_3-C_8 cycloalkoxy, nitro, C_1-C_6 perfluoroalkyl, hydroxy, C_1-C_6 acyloxy, $-NH_2$, $-NH(C_1$-C_6 alkyl), $-N(C_1$-C_6 alkyl)$_2$, $-NH(C_3$-C_8 cycloalkyl), $-N(C_3$-C_8 cycloalkyl)$_2$, hydroxymethyl, C_1-C_6 acyl, cyano, azido, C_1-C_6 thioalkyl, C_1-C_6 sulfinylalkyl, C_1-C_6 sulfonylalkyl, C_3-C_8 thiocycloalkyl, C_3-C_8 sulfinylcycloalkyl, C_3-C_8 sulfonylcycloalkyl, mercapto, C_1-C_6 alkoxycarbonyl, C_3-C_8 cycloalkoxycarbonyl, C_2-C_4 alkenyl, C_4-C_8 cycloalkenyl, or C_2-C_4 alkynyl;

R^5 is hydrogen, halogen, C_1-C_6-perfluoroalkyl, 1,1-difluoro(C_1-C_6)alkyl, C_1-C_6alkyl, $-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-piperazinyl, $-(CH_2)_n$-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino, $-C(H)=CH_2$, -CH=CH-(C_1-C_6)alkyl, $-(CH_2)_n$-N-hexahydroazepine, $-(CH_2)_nNH_2$, $-(CH_2)_nNH(C_1$-C_6alkyl), $-(CH_2)_nN(C_1$-C_6alkyl)$_2$,

-1-oxo(C_1-C_6)alkyl, carboxy, (C_1-C_6)alkyloxycarbonyl, N-(C_1-C_6)alkylcarbamoyl, phenyl or substituted phenyl, wherein the substituted phenyl can have from one to three substituents independently selected from Z^1, Z^2, Z^3 or a monocyclic heteroaryl group, and each C_1-C_6 alkyl group above in R^5 can be substituted with -OH, -NH_2 or -NAB, where A and B are as defined above, R^6 is hydrogen or C_1-C_6 alkyl; R^{13} is hydrogen or halogen; and

n is 1 to 4, p is 0 or 1, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof; or

wherein the erb inhibitor is N-[4-(3-chloro-4-fluoro-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide or a salt thereof; or

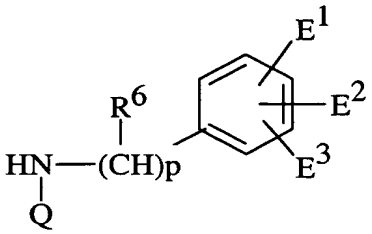
wherein the erb inhibitor is N-[4-(3-bromo-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide.

9. A method of preparing a medicament comprising an antiskin disorder amount of an erb inhibitor in combination with a retinoid for use in treating and preventing retinoid-induced skin injury responsive to erb inhibition.

10. A method according to Claim 9 wherein a retinoid is selected from all-*trans*-retinal, all-*trans* retinol, all-*trans* retinoic acid, 9-cis-retinoic acid, 13-cis-retinoic acid, 13-cis-retinal, 13-cis-retinol, 9-cis-retinal, or 9-cis-retinol; or

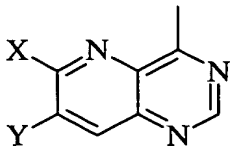
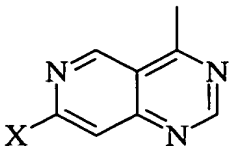
wherein the erb inhibitor is a pyridopyrimidine; or

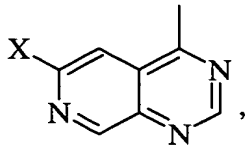
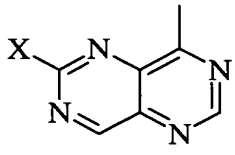
wherein the erb inhibitor is a compound according to Formula II



II

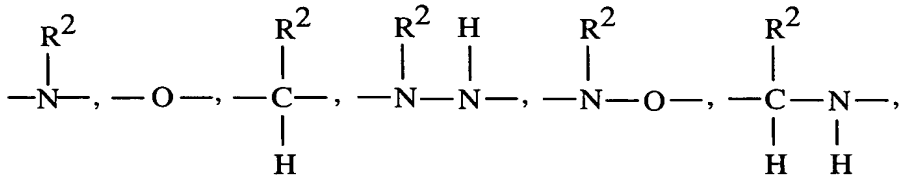
wherein Q is

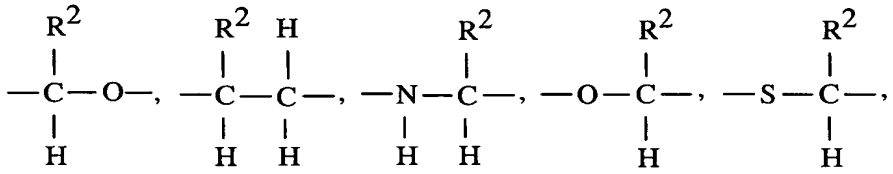

,

,


, or

;

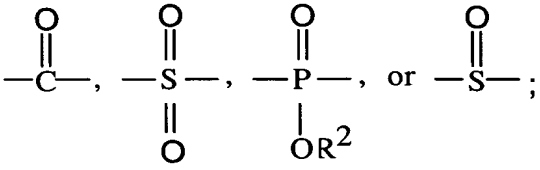
p is 0 or 1;

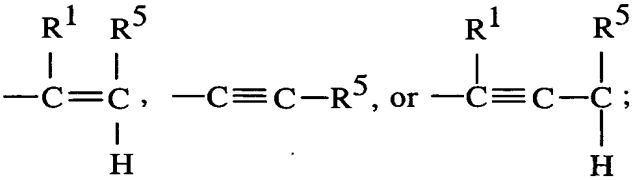
X is -D-E-F and Y is $-SR^4$, $-OR^4$, $-NHR^3$, or hydrogen, or X is $-SR^4$, $-OR^4$, $-NHR^3$, or hydrogen, and Y is -D-E-F;

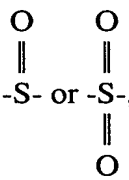
D is 

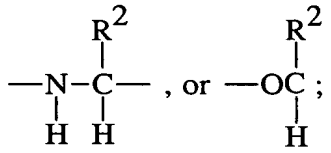


or absent;

E is 

F is 

provided that when E is -S- or  -, D is not



R^1 is hydrogen, halogen, or C_1-C_6 alkyl;

R^2, R^3, and R^4 are independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-pyridinyl, -$(CH_2)_n$-N-imidazoyl, -$(CH_2)_n$-imidazoyl, -$(CH_2)_n$-N-morpholino, -$(CH_2)_n$-N-thiomorpholino, -$(CH_2)_n$-N-hexahydroazepine or substituted C_1-C_6 alkyl, wherein the substituents are selected from OH, -NH_2, or -N(A)-B, A and B are independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$OH, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl, -$(CH_2)_n$-N-pyridyl, -$(CH_2)_n$-imidazoyl, or -$(CH_2)_n$-N-imidazoyl;

E^1, E^2, and E^3 are independently halogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_3-C_8 cycloalkoxy, nitro, C_1-C_6 perfluoroalkyl, hydroxy, C_1-C_6 acyloxy, -NH_2, -NH(C_1-C_6 alkyl), -N(C_1-C_6 alkyl)$_2$, -NH(C_3-C_8 cycloalkyl), -N(C_3-C_8 cycloalkyl)$_2$, hydroxymethyl, C_1-C_6 acyl, cyano, azido, C_1-C_6 thioalkyl, C_1-C_6 sulfinylalkyl, C_1-C_6 sulfonylalkyl, C_3-C_8 thiocycloalkyl, C_3-C_8 sulfinylcycloalkyl, C_3-C_8 sulfonylcycloalkyl, mercapto, C_1-C_6 alkoxycarbonyl, C_3-C_8 cycloalkoxycarbonyl, C_2-C_4 alkenyl, C_4-C_8 cycloalkenyl, or C_2-C_4 alkynyl;

R^5 is hydrogen, halogen, C_1-C_6-perfluoroalkyl, 1,1-difluoro(C_1-C_6)alkyl, C_1-C6 alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-piperazinyl,

$-(CH_2)_n$-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino, $-C{=}CH_2$, $-CH{=}CH-(C_1$-$C_6)$alkyl, $-(CH_2)_n$-N-hexahydroazepine, $-(CH_2)_nNH_2$, $-(CH_2)_nNH(C_1$-C_6alkyl), $-(CH_2)_nN(C_1$-C_6 alkyl)$_2$, -1-oxo(C_1-C_6)alkyl, carboxy, (C_1-C_6) alkyloxycarbonyl, N-(C_1-C_6)alkylcarbamoyl, phenyl or substituted phenyl, wherein the substituted phenyl can have from one to three substituents independently selected from Z^1, Z^2, Z^3 or a monocyclic heteroaryl group, and each C_1-C_6 alkyl group can be substituted with -OH, $-NH_2$ or -NAB, where A and B are as defined above, R^6 is hydrogen or C_1-C_6 alkyl; and

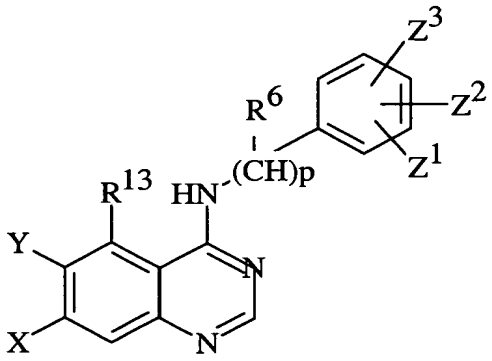
n is 1 to 4, p is 0 and 1, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof; or

wherein the erb inhibitor is 5-(4-methyl-piperazin-1-yl)-pent-2-ynoic acid [4-(3-chloro-4-fluoro-phenylamino)-pyrido[3,4-d]pyrimidin-6-yl]-amide; or

wherein the erb inhibitor is N^4-(3-bromo-phenyl)-N^6-methyl-pyrido[3,4-d]pyrimidine-4,6-diamine; or

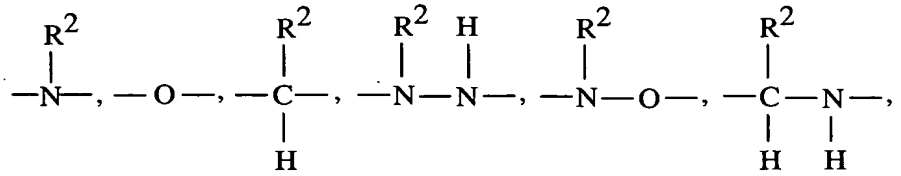
wherein the erb inhibitor is a quinazoline; or

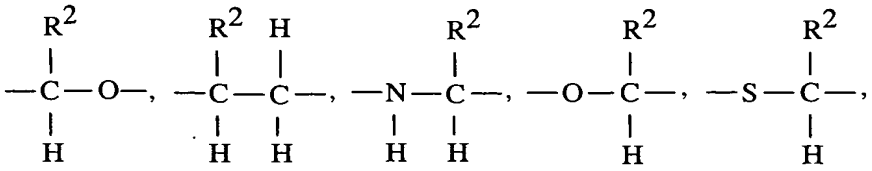
wherein the quinazoline is a compound of Formula I



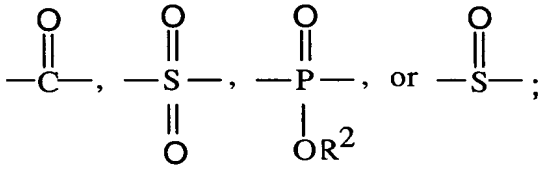
I

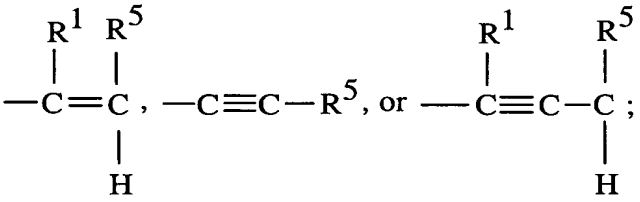
wherein X is -D-E-F and Y is $-SR^4$, halogen, $-OR^4$, $-NHR^3$, or hydrogen, or X is $-SR^4$, halogen, $-OR^4$, $-NHR^3$, or hydrogen, and Y is -D-E-F;

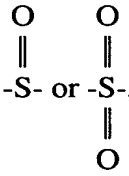
D is 



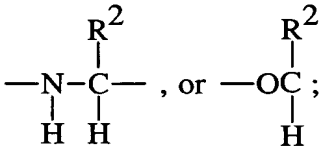
or absent;

E is  ;

F is  ;



provided that when E is -S- or -S-, D is not

 ;

R^1 is hydrogen, halogen, or C_1-C_6 alkyl;

R^2, R^3, and R^4 are independently hydrogen, C_1-C_6 alkyl, -$(CH_2)_n$-N-piperidinyl, -$(CH_2)_n$-N-piperazinyl, -$(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6)alkyl], -$(CH_2)_n$-N-pyrrolidyl,

$-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-imidazoyl, $-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino, $-(CH_2)_n$-N-hexahydroazepine or substituted C_1-C_6 alkyl, wherein the substituents are selected from -OH, $-NH_2$, or $-N(A)-B$, A and B are independently hydrogen, C_1-C_6 alkyl, $-(CH_2)_nOH$, $-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-N-piperazinyl, $-(CH_2)_n$-N_1-piperazinyl[N_4-(C_1-C_6-)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-N-pyridyl, $-(CH_2)_n$-imidazoyl, or $-(CH_2)_n$-N-imidazoyl;

Z^1, Z^2, or Z^3 are independently hydrogen, halogen, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_3-C_8 cycloalkoxy, nitro, C_1-C_6 perfluoroalkyl, hydroxy, C_1-C_6 acyloxy, $-NH_2$, $-NH(C_1$-C_6 alkyl), $-N(C_1$-C_6 alkyl)$_2$, $-NH(C_3$-C_8 cycloalkyl), $-N(C_3$-C_8 cycloalkyl)$_2$, hydroxymethyl, C_1-C_6 acyl, cyano, azido, C_1-C_6 thioalkyl, C_1-C_6 sulfinylalkyl, C_1-C_6 sulfonylalkyl, C_3-C_8 thiocycloalkyl, C_3-C_8 sulfinylcycloalkyl, C_3-C_8 sulfonylcycloalkyl, mercapto, C_1-C_6 alkoxycarbonyl, C_3-C_8 cycloalkoxycarbonyl, C_2-C_4 alkenyl, C_4-C_8 cycloalkenyl, or C_2-C_4 alkynyl;

R^5 is hydrogen, halogen, C_1-C_6-perfluoroalkyl, 1,1-difluoro(C_1-C_6)alkyl, C_1-C_6alkyl, $-(CH_2)_n$-N-piperidinyl, $-(CH_2)_n$-piperazinyl, $-(CH_2)_n$-piperazinyl[N_4-(C_1-C_6)alkyl], $-(CH_2)_n$-N-pyrrolidyl, $-(CH_2)_n$-pyridinyl, $-(CH_2)_n$-N-imidazoyl, $-(CH_2)_n$-N-morpholino, $-(CH_2)_n$-N-thiomorpholino, $-C(H)=CH_2$, -CH=CH-(C_1-C_6)alkyl, $-(CH_2)_n$-N-hexahydroazepine, $-(CH_2)_nNH_2$, $-(CH_2)_nNH(C_1$-C_6alkyl), $-(CH_2)_nN(C_1$-C_6alkyl)$_2$,

-1-oxo(C_1-C_6)alkyl, carboxy, (C_1-C_6)alkyloxycarbonyl, N-(C_1-C_6)alkylcarbamoyl, phenyl or substituted phenyl, wherein the substituted phenyl can have from one to three substituents independently selected from Z^1, Z^2, Z^3 or a monocyclic heteroaryl group, and each C_1-C_6 alkyl group above in R^5 can be substituted with -OH, -NH_2 or -NAB, where A and B are as defined above, R^6 is hydrogen or C_1-C_6 alkyl; R^{13} is hydrogen or halogen; and

n is 1 to 4, p is 0 or 1, and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof; or

wherein the erb inhibitor is N-[4-(3-chloro-4-fluoro-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide dihydrochloride; or

wherein the erb inhibitor is N-[4-(3-bromo-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide; or

wherein the erb inhibitor is N-[4-(3-chloro-4-fluoro-phenylamino)-7-(3-morpholin-4-yl-propoxy)-quinazolin-6-yl]-acrylamide.

11. A method according to Claim 10 wherein the skin disorder is aging; or

wherein the skin disorder is photoaging; or

wherein the skin disorder is acne; or

wherein the skin disorder is psoriasis; or

wherein the skin disorder is precancerous lesions of the skin; or

wherein the skin disorder is skin cancer.